

STATEMENT OF BASIS

as required by LAC 33:IX.3109 for LPDES facilities where a fact sheet is not required under LAC 33:IX.3311, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0065714; AI19476; PER20070001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Louisiana Water Services, Inc.
 Huntwyck Village Wastewater Treatment Facility
 201 Holiday Blvd., Suite 150
 Covington, LA 70433

- II. **PREPARED BY:** Angela Marse

- DATE PREPARED:** March 6, 2008

- III. **PERMIT ACTION:** LPDES permit LA0065714, AI 19476; PER20070001

- LPDES application received: August 29, 2007

- LPDES permit issued: April 1, 2003
- LPDES permit expired: March 31, 2008

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a privately owned treatment facility serving the Huntwyck Village Subdivision and nearby commercial customers.

- B. The permit application does not indicate the receipt of industrial wastewater.

- C. The facility is located 3 miles west of the intersection of Hwy. 11 and Hwy. 190 in Slidell, St. Tammany Parish.

- D. An activated sludge facility is utilized for treatment. The facility consists of an aeration basin and clarifier. Disinfection is by chlorination.

- E. Outfall 001

Discharge Location:	Latitude	30° 17' 31" North
	Longitude	89° 49' 02" West

Description: treated sanitary wastewater

Expected flow: 0.278 MGD

Please note that if the facility grows to a discharge beyond the design capacity of the facility, additional sewage treatment may be required with prior approval of the facility's plan by the Louisiana Department of Health and Hospitals and notification must be submitted to the LDEQ. Also, if the expected flow reaches or exceeds the design capacity of the facility, a permit modification may be required.

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Type of Flow Measurement which the facility is currently using:

Combination Totalizing Meter / Continuous Recorder

V. RECEIVING WATERS:

The discharge is into an unnamed drainage ditch, thence into Bayou Liberty, thence into Lake Pontchartrain in segment 040905 of the Lake Ponchartrain Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 040905 of the Lake Ponchartrain Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment 040905	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Full	Full	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 040905 of the Lake Ponchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

Section 303 (d) of the Clean Water Act as amended by the Water Quality Act of 1987, and EPA's regulations at 40 CFR 130 require that each state identify those waters within its boundaries not meeting water quality standards. The Clean Water Act further requires states to implement plans to address impairments. LDEQ is developing Total Maximum Daily Loadings Studies (TMDLs) to address impaired waterbodies. Segment 040905 of the Lake Pontchartrain Basin is on the 2004 Integrated 303(d) List of Impaired Waterbodies. The suspected impairments are mercury, organic enrichment/low dissolved oxygen, chlorides, sulfates, and TDS. To date no TMDLs have been completed for this waterbody.

Suspected impairments which are not directly attributed to sanitary wastewater treatment plants have been eliminated in the formation of effluent limitations and other requirements of this permit. This is the case with chlorides, sulfates, and TDS. These impairments are attributed to drought related impacts. The remaining impairments are addressed in a manner consistent with the Department's permitting guidance for implementing Louisiana's surface water quality standards as follows:

Dissolved oxygen

Biochemical oxygen demand (or BOD) is the amount of oxygen required by bacteria to oxidize biologically degradable material (normally organic matter) found in wastewater, effluents, and polluted waters. The test measures the amount of oxygen consumed by a sample by naturally occurring bacteria over a five-day period. Therefore, to protect against potential discharges resulting in DO levels below that of state water quality standards for the receiving waterbody, CBOD₅ limits have been placed in the permit. Monitoring for CBOD₅ is the best indicator by which to measure the potential discharge of

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oxygen consuming pollutants at levels that will result in dissolved oxygen below that of state water quality standards. (Because ammonia nitrogen limits have also been placed in the permit, CBOD₅ has been substituted for BOD₅. This inhibits biological activity associated with nitrogen and prevents overestimate of oxygen demand.) In addition to monitoring for CBOD₅, dissolved oxygen is also limited in the permit. This is an instantaneous minimum to ensure the discharge will not create or contribute to oxygen levels below State standards in the receiving waterbody.

Mercury

The source of mercury has been identified as atmospheric deposition. The discharge is not directly into the mercury impaired waterbody. There are few commercial customers (10) and the nature of their business does not appear to contribute to the mercury impairment. (See attached email.) Therefore, no limit or mercury prevention program plan has been included in the draft permit. Should the TMDL for mercury determine a mercury effluent limitation is necessary, a reopener clause has been included in the draft permit.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 040905 of the Lake Ponchartrain Basin, is listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish & Wildlife Service (FWS) as habitat for the *Gulf sturgeon* which is listed as a threatened/endangered species. This strategy was submitted with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). A copy of the draft permit has been submitted to the FWS for review.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mrs. Angela Marse
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

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IX. PROPOSED PERMIT LIMITS:
Final Effluent Limits:
OUTFALL 001

No TMDLs or water quality studies have been conducted or completed for Subsegment 040905 or the Huntwyck Village Wastewater Treatment Plant since the issuance of the previous permit. Therefore, effluent limits will remain the same.

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	23	10 mg/l	15 mg/l	Limits are set in accordance with the St. Tammany Parish Areawide Policy for facilities of this treatment type and size, and through BPJ in accordance with the previous permit.
TSS	35	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility. BPJ also based on previous permit.
Ammonia-Nitrogen	12	5 mg/l	10 mg/l	Limits are set in accordance with the St. Tammany Parish Areawide Policy for facilities of this treatment type and size, and through BPJ in accordance with the previous permit.
Dissolved Oxygen**	---	---	5 mg/l	Limits are set in accordance with the St. Tammany Parish Areawide Policy for facilities of this treatment type and size, and through BPJ in accordance with the previous permit.

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

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****This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.**

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.)

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0065714: Issued: March 21, 2003
Effective: April 1, 2003
Expired: March 31, 2008

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD ₅	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Ammonia-Nitrogen	5 mg/l	10 mg/l	2/month	Grab
Dissolved oxygen	---	5 mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab

The permit contains pretreatment language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates no recent inspections were performed for this facility.

B) Compliance and/or Administrative Orders

A review of the files indicates no recent enforcement actions administered against this facility.

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C) DMR Review

A review of the discharge monitoring reports for the period beginning July, 2005 through December, 2007 has revealed the following violations:

Month	Parameter	DMR Reported Value	Permit Limit
October, 2005	TSS concentration	Daily Avg. 25 mg/l Weekly Avg. 42 mg/l	15 mg/l 23 mg/l
March, 2006	TSS concentration	Daily Avg. 20.5 mg/l Weekly Avg. 27 mg/l	15 mg/l 23 mg/l
April, 2006	TSS concentration	Daily Avg. 18 mg/l Weekly Avg. 25 mg/l	15 mg/l 23 mg/l
November, 2007	TSS Concentration	Daily Avg. 26 mg/l Weekly Avg. 50 mg/l	15 mg/l 23 mg/l

- Although no recent enforcement actions have been administered against this facility. The facility has reported thirteen(13) incidents through LDEQ's SPOC notification system. These incidents were all associated with pump failures and/or manhole overflows. For this reason, the facility will be referred to enforcement for further examination.

XII. ADDITIONAL INFORMATION:**PERMIT REOPENER CLAUSE**

In accordance with LAC 33:IX.2361.C.3, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- Controls any pollutant not limited in the permit; or
- Requires reassessment due to change in 303(d) status of the waterbody; or
- Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body. The Department will be conducting TMDL studies in the Lake Pontchartrain Basin. Completion of the studies is scheduled for 2012. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.278 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.278 \text{ MGD} \times 10 \text{ mg/l} = 23 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between **0.1 MGD** and **0.5 MGD**.

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XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Louisiana Water Services, Inc., Huntwyck Village Wastewater Treatment Facility, August 29, 2007.